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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/899,066	07/06/2001	Se Woong Park	0630-1287P	3176

2292 7590 04/22/2004

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EXAMINER

JELINEK, BRIAN J

ART UNIT	PAPER NUMBER
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2615

DATE MAILED: 04/22/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/899,066

Applicant(s)

PARK, SE WOONG

Examiner

Brian Jelinek

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☒ Certified copies of the priority documents have been received in Application No. ~~09/899,066~~.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

This is a first office action in response to application no. 09/899,066 filed on 7/6/2001 in which claims 1-25 are presented for examination.

Priority

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 2000/38493, filed on 7/6/2000.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms that are not clear, concise and exact. It appears to be a literal translation into English from a foreign document and is replete with grammatical and idiomatic errors. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Appropriate correction is required.

Applicant is required to submit an amendment which clarifies the disclosure so that the examiner may make a proper comparison of the invention with the prior art.

The disclosure is objected to because of the following informalities: figure elements are misnumbered, e.g. "the shaft" on page 3, line 18; "the OLPF" on page 7,

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line 1; "the zoom lens" on page 7, line 17; and the "step" on page 10, line 23.

Appropriate correction is required.

Claim Objections

Claims 4-5 and 8 are objected to because of the following informalities: there is insufficient antecedent basis for the limitation in the claim.

Claim 4 recites the limitation "first trace data," "the daytime mode," "second trace data," and "the nighttime mode" on page 13, line 25 and on page 14, line 1.

Claim 5 recites the limitation "the first trace data," "the second trace data," "the daytime mode," and "the nighttime mode" in lines 5-7.

Claim 8 recites the limitation "the lens unit" in lines 18-19. Appropriate correction is required

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 9, 11-13 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beis (U.S. Pat. No. 5,172,220) in view of Chino (U.S. Pat. No. 6,046,863).

Regarding claim 1, Beis discloses a control method of a CCD (Charge-Coupled Device) camera (col. 6, lines 15-16), comprising: detecting an illumination of a photographing region to be photographed with a CCD camera; and setting a photographing mode of the CCD camera on the basis of comparing the detected illumination with a reference illumination value (col. 2, lines 31-36). Beis further teaches the use of an "optical lens system or objective" (col. 3, line 62), but does not disclose the details of said lens system, e.g. controlling a movement of a lens of the CCD camera in accordance with the set photographing mode by loading corresponding pre-stored trace data of the lens.

However, Chino does teach controlling a movement of a lens of the CCD camera in a zooming mode by loading corresponding pre-stored trace data of the lens (col. 1, lines 13-20). It is well known in the art that a camera comprised of a zoom lens enhances the utility of the camera by allowing distant objects to be imaged. In particular, it is clear that providing in Beis a zoom lens would improve its surveillance function (col. 1, lines 11-13) by providing close-up images of an intruder. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the zoom lens of Chino to provide detailed images of far away objects. In particular, it is clear that the zoom capability provided by Chino would operate in accordance with the set photographing mode since zooming would take place in both modes.

Regarding claims 2 and 3, Beis teaches that the photographing mode is set as a daytime mode when the detected illumination is not less than the reference illumination

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value and that the photographing mode is set as a nighttime mode when the detected illumination is not greater than the reference illumination value (col. 1, lines 9-10 and col. 2, lines 31-35).

Regarding claims 4 and 5, Beis teaches moving a filter into the optical path in the daytime mode (col. 6, lines 33-37) and that a filter is not provided for the nighttime mode (col. 6, lines 40-41). In addition, Chino teaches that the insertion or removal of a filter (corresponding to daytime and nighttime modes) changes the optical system, which can be compensated for by switching to a second zoom tracking curve (col. 1, lines 34-52).

Regarding claim 9, Chino teaches that the trace data is stored in a memory of the CCD camera and is loaded into a control unit of the CCD camera upon conversion of the photographing mode (col. 2, lines 20-22; col. 2, lines 10-14).

Regarding claim 11, Beis discloses a control method of a CCD (Charge-Coupled Device) camera (col. 6, lines 15-16), comprising: detecting an illumination of a photographing region to be photographed by a CCD camera; and setting a photographing mode of the CCD camera to a daytime mode or a nighttime mode by judging whether the detected illumination is less or greater than a reference illumination value (col. 1, lines 9-10 and col. 2, lines 31-35). Beis further teaches moving a filter into the optical path only in the daytime mode (col. 6, lines 33-37) and thus a filter is not provided for the nighttime mode. Moreover, Beis teaches the use of an "optical lens system or objective" (col. 3, line 62), but does not disclose the details of said lens system, e.g. controlling a movement of a lens of the CCD camera on the basis of first trace data and second trace data.

However, Chino does teach controlling a movement of a lens of the CCD camera in a zooming mode by loading pre-stored trace data of the lens (col. 1, lines 13-20). Furthermore, Chino teaches that the insertion or removal of a filter (corresponding to daytime and nighttime modes) changes the optical system, which can be compensated for by switching between a first and second zoom trace curve (col. 1, lines 34-52). Also see the examiner's comments regarding claims 1, 4, and 5.

Regarding claim 12 and 13, Beis teaches that the daytime mode is set when the detected illumination is not less than the reference illumination value and that the nighttime mode is set when the detected illumination is not greater than the reference illumination value (col. 1, lines 9-10 and col. 2, lines 31-35).

Regarding claim 17, Chino teaches that the first and second trace data are pre-stored in a memory (col.1, lines 20-27). In addition, from Fig. 5 it is clear that the trace data is stored in a map format because the positions of the focusing lens are correlated to a plurality of positions of the zoom lens.

Claims 6-8, 10, 14-16, and 18-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beis (U.S. Pat. No. 5,172,220) in view of Chino (U.S. Pat. No. 6,046,863), and further in view of Mizoguchi et al. (U.S. Pat. No. 5,959,669).

Regarding claim 6, Beis teaches that a filter may be placed into the optical path for photographing in a visible ray region in a daytime mode (col. 6, lines 33-37). Beis does not specially teach photographing through an Optical Low Pass Filter (OLPF).

However, Mizoguchi et al. does teach photographing through an OLPF placed in the optical path (col. 1, lines 25-30). As Mizoguchi et al. teaches, it is well known in the art to photograph through an OLPF placed in the optical path in order to prevent aliasing in color images that contain high spatial frequencies (col. 1, lines 20-34). It is clear that providing the OLPF of Mizoguchi et al. would eliminate color moire and improve picture quality. As a result, it would have been obvious to one skilled in the art at the time of the invention to provide the OLPF of Mizoguchi et al. in the zoom camera of Beis and Chino for photographing in a visible ray region in a daytime mode.

Regarding claim 7, see the examiner's comments on the 103 rejection of claim 5 and 6 and note that Beis teaches photographing an object in an infrared ray region (defined in the specification as a region having a low illumination) in the nighttime mode without passing through an OLPF (Optical Low Pass Filter).

Regarding claim 8, Mizoguchi et al. teaches that the OLPF is included in a lens unit of the CCD camera and is mechanically switched in or out of an optical path of the lens unit according to the photographing mode (Fig. 11a and 11b; and col. 3, lines 39-40).

Regarding claim 10, see the examiner's comments on the 103 rejection for claim 6 above, and note that Chino further teaches that the trace data includes values for compensating a focus error of the lens in accordance with the use or not of a filter in the lens (col. 1, lines 26-27 and col.1, lines 45-52).

Regarding claim 14, please see the examiner's comments on the 103 rejection for claim 6, and note that an object photographed in a visible ray region through an

OLPF (Optical Low Pass Filter) of the lens in the daytime mode is taught.

Regarding claim 15, see the examiner's comments on the 103 rejection for claim 7, and note that an object photographed in an infrared ray region without passing through an OLPF (Optical Low Pass Filter) of the lens in the nighttime mode is taught.

Regarding claim 16, please see the examiner's comments on the 103 rejection of claim 10, and note that a first and second trace data are taught for compensating a focus error in accordance with the use or not of the OLPF.

Regarding claim 18, see the examiner's comments on the 103 rejection for claims 6 and 10 above, and note a first trace data is for compensating a focus error of the lens varied through an OLPF (Optical Low Pass Filter) in the lens in the daytime mode is taught.

Regarding claim 19, please see examiner's comments in the 103 rejection of claim 8 and note that the OLPF is included in a lens unit of the CCD camera and is mechanically switched in and out of an optical path of the lens.

Regarding claim 20, see the examiner's comments in the 103 rejection of claim 5 and 7, and note that a second trace data for compensating a focus error of the lens varied by not passing through the OLPF in the nighttime mode is taught.

Regarding claim 21, Beis discloses a control method of a CCD (Charge-Coupled Device) camera (col. 6, lines 15-16), comprising: detecting an illumination of a photographing region to be photographed by a CCD camera and converting a photographing mode of the CCD camera into a daytime mode or a nighttime mode by judging whether the detected illumination is not less or greater than a reference

illumination value (col. 1, lines 9-10 and col. 2, lines 31-35). Furthermore, Beis teaches photographing the photograph region through a filter when the photographing mode is converted into the daytime mode (col. 1, lines 9-10 and col. 6, lines 33-37) and photographing the photograph region without imaged light of the photographing region passing through a filter when the photographing mode is converted into the nighttime mode (see col. 1, lines 9-10 and col. 6, lines 39-41 and note that the filter is used only for the daytime mode).

Beis does not teach loading first trace data for controlling a lens of the CCD camera so as to photograph the photographing region through an OLPF (Optical Low Pass Filter) when the photographing mode is converted into the daytime mode; loading second trace data for controlling the lens of the CCD camera so as to photograph the photographing region without imaged light of the photographing region passing through the OLPF when the photographing mode is converted into the nighttime mode; and adjusting a focus of the lens of the CCD camera on the basis of the loaded trace data.

However, Chino teaches a zoom lens that compensates for the insertion or removal of a filter (corresponding to the daytime and nighttime modes of Beis) by switching from a first to a second zoom tracking curve (col. 1, lines 34-52). In addition, Mizoguchi et al. teaches that it is desirable to photograph through an OLPF placed in the optical path in order to prevent aliasing (col. 1, lines 20-34). Also see the examiner's comments regarding claims 1 and 4-6.

Regarding claim 22, please see the examiner's comments on the 103 rejection of claim 10, and note that a first and second trace data are taught for compensating a focus error in accordance with the use or not of the OLPF.

Regarding claims 23-24, please see the examiner's comments on the 103 rejection of claim 4, and note that the first trace data loading process is performed in the daytime mode and the second trace data loading process is performed in the nighttime mode.

Regarding claim 25, please see the examiner's comments on the 103 rejection of claim 8, and note that the OLPF is included in the camera and is mechanically switched in or out of an optical path of the lens in accordance with the photographing mode.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Jelinek whose telephone number is (703) 305-4724. The examiner can normally be reached on M-F 8:00 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Christensen can be reached on (703) 308-9644. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian Jelinek
4/19/2004



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